

### REMARKS

This Application has been carefully reviewed in light of the Office Action mailed January 8, 2009. At the time of the Office Action, Claims 10 and 12-24 were pending in this Application. Claims 10 and 12-24 were rejected. Claims 12, 14-17 and 20-23 have been amended to further define various features of Applicants' invention. Claims 18 and 24 are cancelled without prejudice or disclaimer, and Claims 1-9 and 11 were previously cancelled without prejudice or disclaimer. Applicants respectfully request reconsideration and favorable action in this case.

#### **Rejections under 35 U.S.C. § 112**

Claims 14-18 and 20-23 were rejected by the Examiner under 35 U.S.C. §112, second paragraph, as being indefinite and failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants amend Claims 14-17 and 20-23 to overcome these rejections and respectfully request full allowance of Claims 14-17 and 20-23 as amended. Claim 18 has been cancelled.

#### **Rejections under 35 U.S.C. § 102**

Claims 10, 12, 13, 19, and 24 were rejected by the Examiner under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,345,916 issued to Amann et al. ("*Amann*"). Applicants respectfully traverse and submit the cited art does not teach all of the elements of the claimed embodiment of the invention.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "the identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co. Ltd.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Applicants respectfully submit that *Amann* does not teach every element of Applicants' claims. For example, amended Claim 10 recites:

10. A method for controlling a fuel pressure in a fuel supply device of an internal combustion engine having a regulator valve, the method comprising the steps of:

determining a desired fuel pressure value;

determining an actual fuel pressure value;

calculating an actual gradient selected from the group consisting of: an actual fuel flow rate gradient and an actual fuel pressure gradient;

comparing the calculated actual gradient to a specified threshold gradient value; and

if the calculated actual gradient is above the specified threshold gradient value then determining an actuating signal as a function of the desired fuel pressure value and the calculated actual gradient; and

controlling said regulator valve with said actuating signal.

Amended Claim 14 recites similar features. *Amann* does not teach these features of amended Claims 10 and 14. The Examiner points to col. 4, lines 30-55 and Figure 6 of *Amann* as teaching the features of Claim 1. Col. 4, lines 30-55 merely teaches:

To provide for improved tailoring of each injection event for improving engine firing, this invention controls the operation (energization and de-energization) of solenoid 58 through microprocessor 80. By energizing the solenoid 58 at different points or angles along the pumping ramp of the cam as determined by engine operating conditions, the start of injection is determined and detected by the microprocessor. The microprocessor knowing the cam angle for start of injection and the quantity of fuel to be injected calculates the angle at which fuel injection is to be terminated. The microprocessor accordingly de-energizes the solenoid after a predetermined angle is reached so that delivery of the desired fuel quantity is injected.

On solenoid de-energization, the valve 60 is displaced by spring 62 to move head 61 of the valve element from its seat and the fuel is "spilled" into the end chamber 52, and thereby back into the fuel supply system. These controls shape the fuel pressure pulses or waves with varying rates in accordance with predetermined classic injection profiles, such as shown in FIG. 6 for examples, programmed into the software of the microprocessor for optimizing fuel burn in the combustion chambers of the engine.

These passages, along with the rest of *Amann*, fail to teach calculating a gradient, much less "calculating an actual gradient selected from the group consisting of: an actual fuel

flow rate gradient and an actual fuel pressure gradient.” These passages, along with the rest of *Amann*, also fail to teach comparing a calculated actual gradient to a specified threshold gradient, and if the calculated actual gradient is above the specified threshold gradient, determining an actuating signal as a function of the desired fuel pressure value and the calculated actual gradient. *Amann* teaches nothing about calculating an actual gradient, comparing a calculated gradient to a threshold gradient, or determining an actuating signal as a function of a desired fuel pressure value and a calculated actual gradient.

For at least these reasons, *Amann* does not teach each and every element of amended independent Claims 10 and 14. Thus, Applicants respectfully request reconsideration and allowance of independent Claims 10 and 14, as well as all claims that depend therefrom.

**CONCLUSION**

Applicants have made an earnest effort to place this case in condition for allowance in light of the remarks set forth above. Applicants respectfully request reconsideration of the pending claims.

Applicants respectfully submit a Petition for One-Month Extension of Time. The Commissioner is authorized to charge the fee of \$130.00 required to Deposit Account 50-4871 in order to effectuate this filing.

Applicants believe no other fees are due; however, should the Commissioner deem that any additional fees are due, including any fees for any additional extensions of time, the Commissioner is hereby authorized to debit said fees from deposit account number 50-4871, reference 078857.0420.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512-457-2030.

Respectfully submitted,  
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